

IN THE CLAIMS

1. (Original) A biosensor measuring instrument, chip with measuring reliability, comprising:

a substrate having a first section and a second section, an operational electrode and a counterpart electrode spaced-apart from each other and formed on said first section, a first resistor connected with said operational electrode in series, and a first terminal and a second terminal formed on said second section; wherein said operational electrode and said counterpart electrode constitute a second resistor R_s , and the resistance of said first resistor ~~connected with said operational electrode in series~~ is equal to or greater than a maximum resistance of said second resistor R_s , said operational electrode and said counterpart electrode respectively electrically ~~connect~~ connected to said first terminal and said second terminal, and said first terminal and said second terminal being configured for electrical connection ~~electrically connect~~ to a main detecting unit of a biosensor, said main detecting unit is used for detecting a response current passing through said operational electrode, said response current is generated in response to a specific component of a specimen applied on said chip. [[;]]

~~a reaction layer placed above said first section of said substrate for covering said operational electrode and said counterpart electrode, said reaction layer including a redox mediator and an enzyme, said redox mediator and said specific component of said specimen applied on said chip proceeding an electrochemical reaction under catalysis of said enzyme;~~

~~—— a spacer placed said reaction layer, said spacer having a passage formed in an end thereof corresponding to said reaction layer; and~~

~~—— a cover placed above said spacer, said cover having an opening over said passage of said spacer in order for said specimen sucked into said reaction layer through said opening and said passage.~~

2. (Currently Amended) The [[chip]]instrument of claim 1, wherein said operational electrode and said counterpart electrode have the same conductive material.

3. (Currently Amended) The [[chip]]instrument of claim 1, wherein said specific component of said specimen to be detected depends on said enzyme of said reaction layer.

4. (Currently Amended) The [[chip]]instrument of claim 3, wherein said chip is used for detecting a glucose concentration of a blood sample.

5. (Currently Amended) The [[chip]]instrument of claim 3, wherein said chip is used for detecting a lactic acid concentration of saliva.

6. – 17. (Canceled)

18. (New) The instrument of claim 1, further comprising a reaction layer at said first section of said substrate for at least partially covering said operational electrode and said counterpart electrode.

19. (New) The instrument of claim 18, wherein the reaction layer includes a redox mediator and an enzyme, said redox mediator and said specific component of said specimen applied on said chip proceeding an electrochemical reaction under catalysis of said enzyme.

20. (New) The instrument of claim 18, further comprising a spacer over at least a portion said reaction layer.

21. (New) The instrument of claim 20, further comprising a cover over said spacer, said cover having an opening through which said specimen can be introduced.

22. (New) A biosensor measuring instrument comprising:
a substrate having a first section and a second section;
a first lead terminal and a second lead terminal each formed on the second section of the substrate;

a counterpart terminal electrode formed on the first section of the substrate, the counterpart terminal electrode electrically connected to the second lead terminal;

an operational terminal electrode formed on the first section of the substrate, the operational terminal electrode electrically connected to the first lead terminal, wherein the operational terminal electrode and the counterpart terminal electrode constitute a first resistor having a first resistance; and

a second resistor on the substrate, the second resistor having a second resistance substantially equal to or greater than the first resistance of the first resistor, wherein the second resistor is serially connected with the first resistor.

23. (New) The instrument of claim 22, wherein the second resistor includes a resistor electrically connected between the operational terminal electrode and the first lead terminal.

24. (New) The instrument of claim 22, wherein the second resistor includes a widened portion of the counterpart terminal electrode and a widened portion of the operational terminal electrode.

25. (New) The instrument of claim 22, wherein the second resistor includes a bent strip portion of the counterpart terminal electrode and a bent strip portion of the operational terminal electrode.

26. (New) The instrument of claim 25, wherein the bent strip portion of the counterpart terminal electrode is substantially the same dimension as the bent strip portion of the operational terminal electrode.

27. (New) A biosensor measuring instrument for determining the blood sugar level of a specimen, the instrument comprising:

a substrate having an operational terminal electrode and a counterpart terminal electrode respectively connected to first and second lead terminals;

a reaction layer including a redox mediator and an enzyme and covering the operational terminal electrode and counterpart terminal electrode;

a spacer disposed over the reaction layer, and a cover disposed over the spacer, wherein the operational terminal electrode and the counterpart terminal electrode constitute a first resistor having a first resistance; and

a second resistor serially connected between the first resistor and the lead terminals, the second resistor having a second resistance substantially equal to or greater than the first resistance of the first resistor.

28. (New) The instrument of claim 27, wherein the second resistor includes a resistor electrically connected between the operational terminal electrode and the first lead terminal.

29. (New) The instrument of claim 27, wherein the second resistor includes a widened portion of the counterpart terminal electrode and a widened portion of the operational terminal electrode.

30. (New) The instrument of claim 27, wherein the second resistor includes a bent strip portion of the counterpart terminal electrode and a bent strip portion of the operational terminal electrode.

31. (New) The instrument of claim 30, wherein the bent strip portion of the counterpart terminal electrode is substantially the same dimension as the bent strip portion of the operational terminal electrode.

32. (New) A biosensor measuring instrument comprising:
a substrate having a first section and a second section;
a first lead terminal and a second lead terminal each formed on the second section of the substrate;
a first resistive means on the first section of the substrate for providing a first resistance between the first and second lead terminal; and
a second resistive means on the substrate for providing a second resistance substantially equal to or greater than the first resistance of the first resistor, wherein the second resistive means is serially connected with the first resistive means.